Order Example Report

Name FirstName LastName

Date of Birth DD-Mmm-YYYY

Fasted For XX hours and XX minutes

Date of Sample Collection DD-Mmm-YYYY

Date of Report DD-Mmm-YYYY

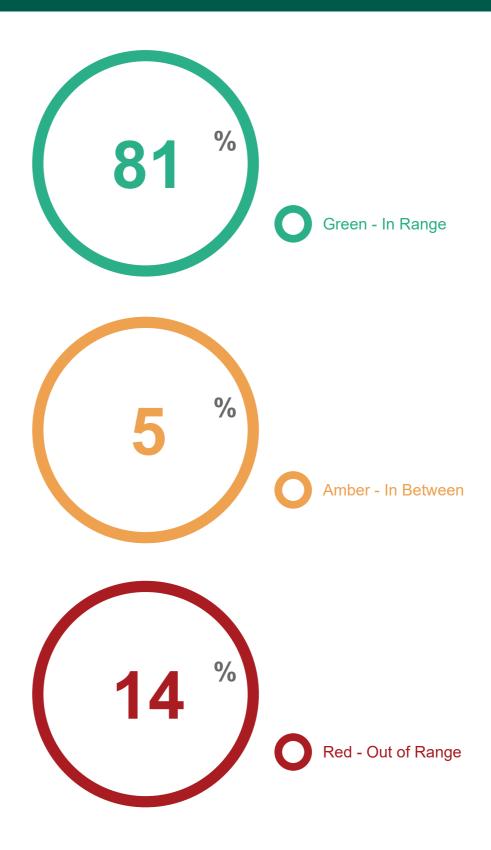
Programme Standard Screen Plus Male

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Health Status

Track and improve your Health Status each time you visit Randox Health.



0080-RT (2), June 2020

Your Results of Interest

The results presented in this section are a summary of all the tests that are either positive or fall outside the reference ranges. What does this mean? A reference range is a term used to determine if your results are within what is considered to be the 'normal' range of the population. If your results are outside the range for a test, it does not automatically mean the result is abnormal. Depending on each person's individual medical history, current medications and ongoing conditions or diseases, the results must be interpreted in this context to fully understand what these results mean to you. Therefore, in this section those results that are either positive or fall outside the reference range are highlighted so that they can be reviewed by a GP / Consultant to understand the relevance to your health. These results will also appear again throughout the report alongside the other results for that profile.



Personal Health Measurements

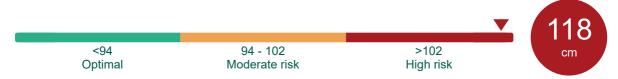
Body Mass Index (BMI)

Body Mass Index (BMI) calculated from an individual's weight and height, is an indicator of body fat and can identify weight problems, in terms of whether an individual is underweight, overweight or obese. Such weight problems are risk factors for conditions such as heart disease, high blood pressure, metabolic syndrome, diabetes, cancer and respiratory problems.



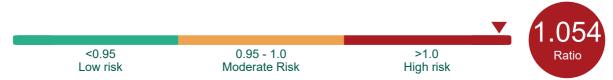
Waist Circumference

Waist Circumference relates closely to body mass index (BMI) and is part of the waist to hip ratio measurement. Waist circumference is a measure of central or abdominal fat and provides additional information on disease risk and other long-term health problems. Increased weight around the abdomen can increase the risk of developing conditions such as type 2 diabetes, metabolic syndrome, coronary heart disease and high blood pressure.



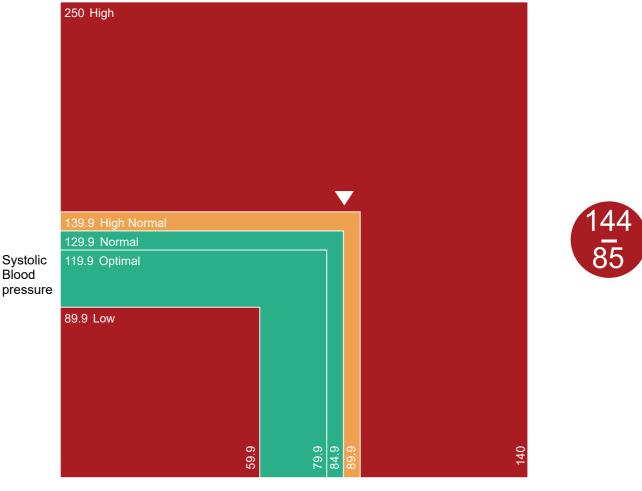
Waist / Hip Ratio

Waist / Hip Ratio is a measure of fat distribution and scientific research has demonstrated that people carrying more weight around their waist (apple shaped) have a greater risk of developing lifestyle related diseases such as heart disease and diabetes than people with excess fat around their hips (pear shaped).



Blood pressure

Blood Pressure is a measurement of the force applied to the walls of the arteries as the heart pumps blood through the body. Systolic blood pressure refers to the pressure of blood as your heart contracts. Diastolic blood pressure refers to the pressure of blood as your heart rests between beats. High blood pressure is a significant risk factor for the development of heart disease, stroke, kidney disease and metabolic syndrome. Dehydration, bleeding, inflammation, infection, heart disease, pregnancy and various medications can cause low blood pressure. Physically fit individuals may have low blood pressure and in some individuals, blood pressure is naturally low.



Diastolic Blood pressure



Heart Health

HDL Cholesterol

HDL Cholesterol describes cholesterol that is bound to high-density lipoprotein (HDL). Lipoproteins are responsible for transporting cholesterol in the blood. HDL cholesterol is 'protective' as it removes cholesterol from the peripheral tissues and transports it back to the liver for removal from the body. A low HDL cholesterol level is undesirable and is associated with increased risk of atherosclerosis (accumulation of cholesterol and fatty material within blood vessel walls) and cardiovascular disease. Obesity, metabolic syndrome (a set of risk factors for diabetes and cardiovascular disease occurring simultaneously), uncontrolled diabetes, smoking, malnutrition and lack of exercise are associated with low HDL cholesterol levels.



Cardiovascular Risk Score

Cardiovascular Risk Score is a calculation that takes into account age, blood pressure, cholesterol levels and other risk factors for cardiovascular disease, which can help assess an individual's risk of developing diseases of the cardiovascular system over the next ten years. A higher cardiovascular risk score is associated with increased risk of angina, heart attack and stroke.





Metabolic Syndrome

Body Mass Index (BMI)

Body Mass Index (BMI), {Metabolic Syndrome} calculated from an individual's weight and height, is an indicator of body fat and can identify weight problems, in terms of whether an individual is underweight, overweight or obese. The National Cholesterol Educational Program (NCEP) Adult Treatment Panel III (ATP III) states that individuals who have a BMI above 30 kg/m2 are at risk of metabolic syndrome. BMI does not take into account age, gender or muscle mass; therefore, an individual with a high muscle mass may be classified as overweight or obese.



Waist Circumference

Waist Circumference {Metabolic Syndrome} relates closely to body mass index (BMI) and is part of the waist to hip ratio measurement. Waist circumference is a measure of central or abdominal fat and provides additional information on disease risk. The National Cholesterol Educational Program (NCEP) Adult Treatment Panel III (ATP III) states that individuals who have central obesity (defined as waist circumference greater than or equal to either 94 cm or 90 cm for males (depending on ethnicity) and greater than or equal to 80 cm for females) are at risk of metabolic syndrome.



Systolic Blood pressure

Systolic Blood Pressure {Metabolic Syndrome} is a measure of the pressure in the blood vessels when the heart contracts and pushes blood through the circulatory system. According to the National Cholesterol Educational Program (NCEP) Adult Treatment Panel III (ATP III), systolic blood pressure measurements equal to or greater than 130 mmHg are associated with metabolic syndrome. Additionally, individuals currently receiving treatment for high blood pressure are at risk of metabolic syndrome irrespective of blood pressure measurement.



Diastolic Blood pressure

Diastolic Blood Pressure {Metabolic Syndrome} is a measure of the pressure in the blood vessels when the heart rests between contractions and refills with blood. According to the National Cholesterol Educational Program (NCEP) Adult Treatment Panel III (ATP III), diastolic blood pressure measurements equal to or greater than 85 mmHg are associated with metabolic syndrome. Additionally, individuals currently receiving treatment for high blood pressure are at risk of metabolic syndrome irrespective of blood pressure measurement.



HDL Cholesterol

HDL Cholesterol {Metabolic Syndrome} describes cholesterol that is bound to high-density lipoprotein (HDL). Lipoproteins are responsible for transporting cholesterol in the blood. HDL cholesterol is considered to be 'good' or to have a 'protective effect' as it removes cholesterol from the peripheral tissues and transports it back to the liver for removal from the body.

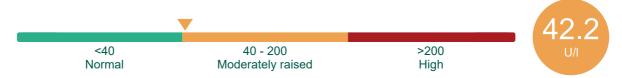




Liver Health

Alanine Aminotransferase (ALT)

Alanine Aminotransferase (ALT) is an enzyme found mainly in the liver. Normally, a low level of ALT exists in the blood. Liver injury or disease will release ALT into the bloodstream, thus elevating blood ALT levels. Very high levels of ALT can be due to acute hepatitis, often resulting from a viral infection. High levels can be associated with chronic liver disease, such as cirrhosis (scarring of the liver), excessive alcohol intake and conditions that cause blockage of the flow of bile from the liver. Mild elevations are often due to fatty liver disease, a common finding associated with mild liver dysfunction, obesity and increased risk of diabetes.



Gamma-Glutamyltransferase (GGT)

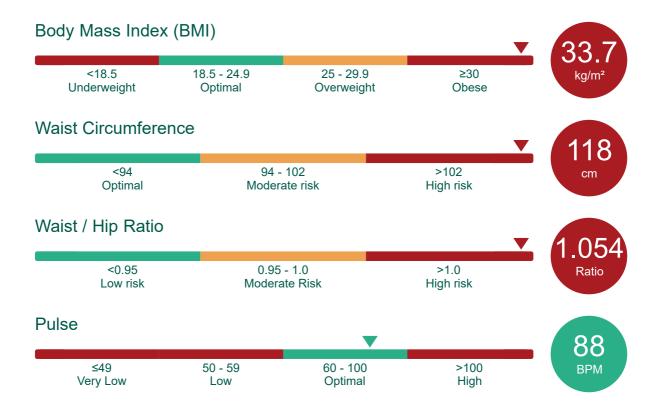
Gamma-Glutamyltransferase (GGT) is an enzyme found mainly in the liver. Increased levels of GGT in the blood may indicate bile duct injury, hepatitis (inflammation of the liver), cirrhosis (scarring of the liver), liver tumours or the use of drugs that are toxic to the liver. A high GGT level is frequently associated with increased alcohol consumption, as this liver enzyme is involved in the breakdown and removal of alcohol from the body. In addition, some medications can raise GGT levels.





Personal Health Measurements

Measurements include pulse, blood pressure, waist circumference and calculation of body mass index (BMI). Various lifestyle and hereditary factors can influence these parameters, which are useful in the overall assessment of an individual's risk of developing conditions such as cardiovascular disease or diabetes. The measurement of oxygen saturation by pulse oximetry is also included. A low blood oxygen level, or hypoxaemia, may be associated with airway obstruction, which occurs in conditions such as asthma, emphysema and chronic obstructive pulmonary disease.

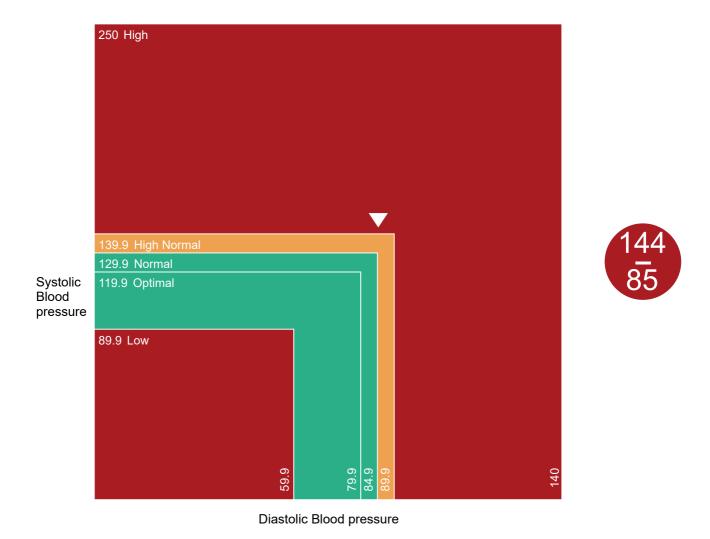


Blood pressure

Height

1.87 m

Blood Pressure is a measurement of the force applied to the walls of the arteries as the heart pumps blood through the body. Systolic blood pressure refers to the pressure of blood as your heart contracts. Diastolic blood pressure refers to the pressure of blood as your heart rests between beats. High blood pressure is a significant risk factor for the development of heart disease, stroke, kidney disease and metabolic syndrome. Dehydration, bleeding, inflammation, infection, heart disease, pregnancy and various medications can cause low blood pressure. Physically fit individuals may have low blood pressure and in some individuals, blood pressure is naturally low.



Weight

117.9 kg

Hip Circumference

112 cm



Full Blood Count

This panel provides information about the type and number of cells in the blood, including red blood cells, white blood cells and platelets. Red blood cells contain haemoglobin, a protein that carries oxygen from the lungs to all the tissues of the body and carbon dioxide back to the lungs. White blood cells form part of the immune system and help to defend the body against infection from foreign substances such as bacteria, fungi and viruses. The major types of white blood cells are neutrophils, lymphocytes, monocytes, eosinophils and basophils, with each having their own role in protecting the body from infection. Platelets are important for blood clotting. Their sticky surface enables them, along with other substances, to help wounds heal by forming clots to stop bleeding. The Full Blood Count is useful for evaluating general health status and as a screening tool for a variety of conditions, such as anaemia, infection, inflammation and other blood disorders.

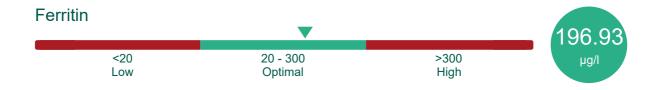






Iron Status

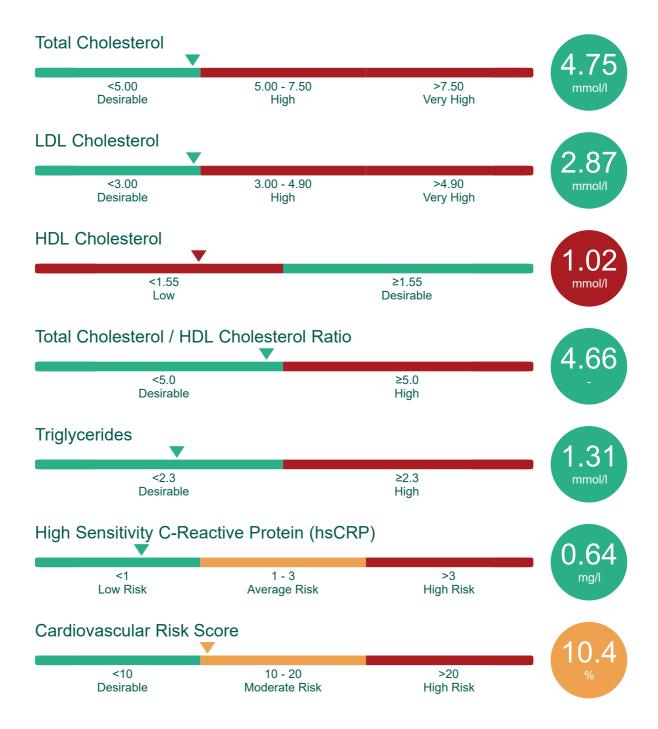
Iron is essential for red blood cell formation. Most of the body's iron, approximately 70%, is present in red blood cells, where its primary role is to carry oxygen from the lungs to all the tissues of the body. Additionally, iron facilitates energy production and release from cells and participates in the functioning of the immune and central nervous systems. Iron Status is useful for evaluating conditions such as iron-deficiency, which can cause anaemia, and iron overload, which can cause organ damage, particularly to the liver.





Heart Health

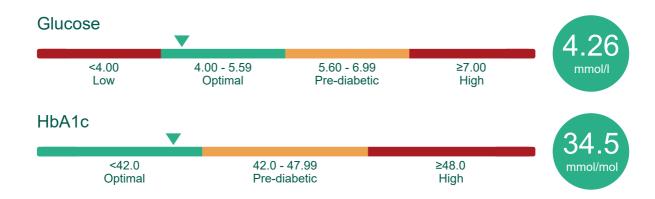
A major contributing factor to heart disease is the gradual accumulation of fat and cholesterol within blood vessel walls, a process known as atherosclerosis. Cholesterol is a fatty substance that is vital for the normal functioning of the body. However, too much cholesterol is damaging and the risk of developing heart disease is greater in individuals with high cholesterol levels. Heart Health helps assess an individual's risk of developing cardiovascular diseases such as heart disease and stroke.





Diabetes Health

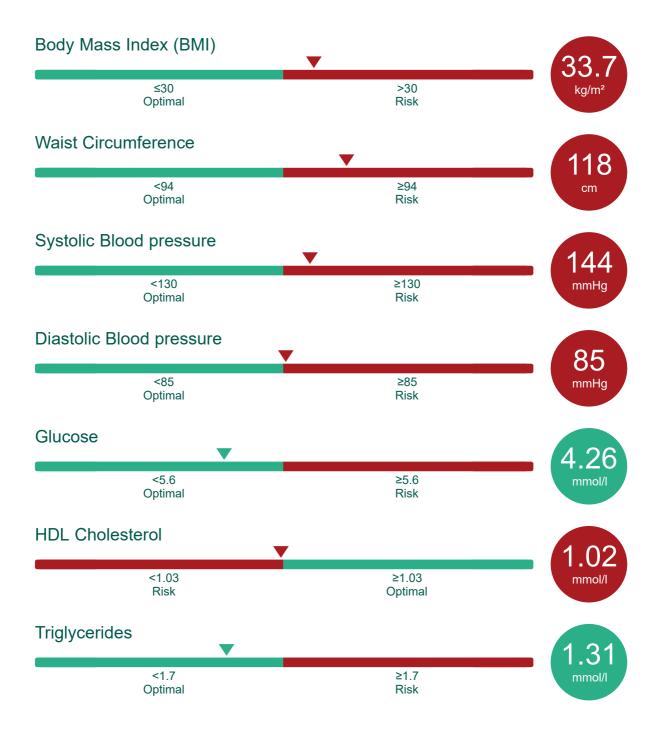
Diabetes mellitus is a chronic condition that is characterised by a high blood glucose level. Normally, insulin (a hormone produced by the pancreas) regulates blood glucose levels. Type 1 diabetes is a condition in which the insulin producing cells of the pancreas are destroyed resulting in very little or no insulin production. Type 2 diabetes is a condition in which the pancreas continues to produce insulin but blood sugar levels remain high due to an insufficient amount of insulin or insulin resistance. Although glucose provides an essential fuel for the body, long-term high levels of glucose are destructive, causing damage to blood vessels, nerves and organs. This damage can increase the risk of developing high blood pressure, heart disease, kidney disease and loss of vision. The Diabetes Health panel includes measurement of glucose and HbA1c levels in the blood, which is useful for the diagnosis and monitoring of diabetes. Higher than normal levels can be associated with a greater risk of developing diabetes in the future ('high risk' or 'pre-diabetes').

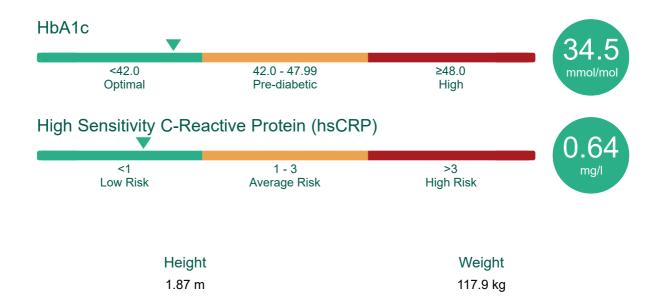




Metabolic Syndrome

Metabolic syndrome refers to a collection of risk factors occurring simultaneously that together increase the risk of developing cardiovascular disease, type 2 diabetes and stroke. The National Cholesterol Educational Program (NCEP) Adult Treatment Panel III (ATP III) has defined metabolic syndrome as the presence of three or more of the following five factors: central obesity (increased body mass index (BMI) or waist circumference), high blood pressure, high fasting blood glucose, low HDL cholesterol, and elevated triglycerides. Previous diagnosis of type-2 diabetes, treatment for high blood pressure, or specific treatments for low HDL cholesterol and high triglycerides also count as factors. The risk of future heart disease, stroke or diabetes increases with the number of risk factors acquired. The Metabolic Syndrome panel includes the measurement of the five factors mentioned above and is indicative of an individual's risk of future cardiovascular disease and type-2 diabetes.

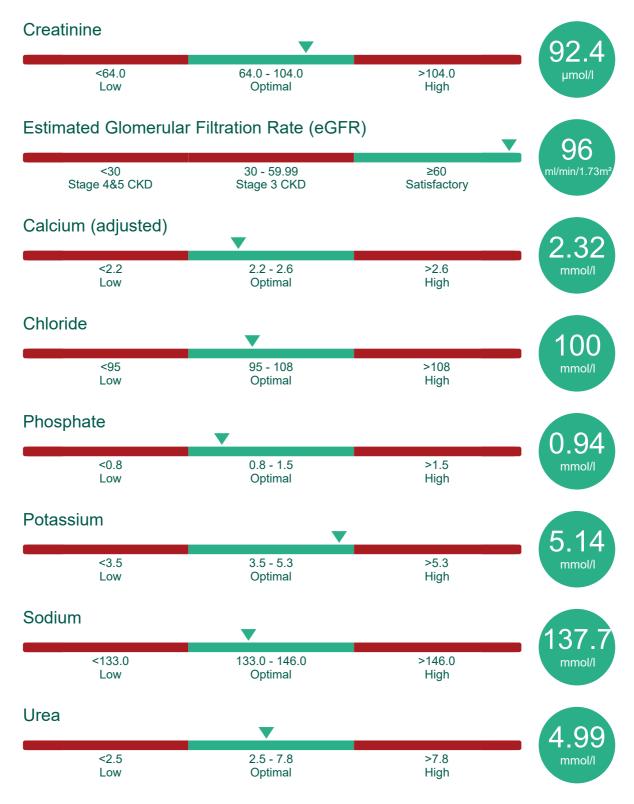






Kidney Health

The kidneys are responsible for the production of urine and regulation of water and salt levels in the blood. The kidneys filter blood to remove waste products, water and salts. The fluid containing these waste products travels through kidney tubules where re-absorption of water and salts takes place. This absorption process is crucial to the maintenance of fluid balance in the body, which is also important for blood pressure regulation. Many conditions can impair the filtering ability of the kidney or lead to destruction of kidney tissue, including urinary tract obstruction, glomerulonephritis and acute kidney injury. Kidney Health helps evaluate the filtering ability of the kidneys and can indicate how well the kidneys are functioning.





Urinalysis

Urinalysis is part of routine diagnostic and screening evaluations. It can reveal a significant amount of preliminary information about the kidneys and other metabolic processes. Urinalysis tests for substances that are normally not present or are present at low concentrations in the urine. In addition, pH measurement helps determine the acidity of urine and is indicative of acid-base balance in the body.

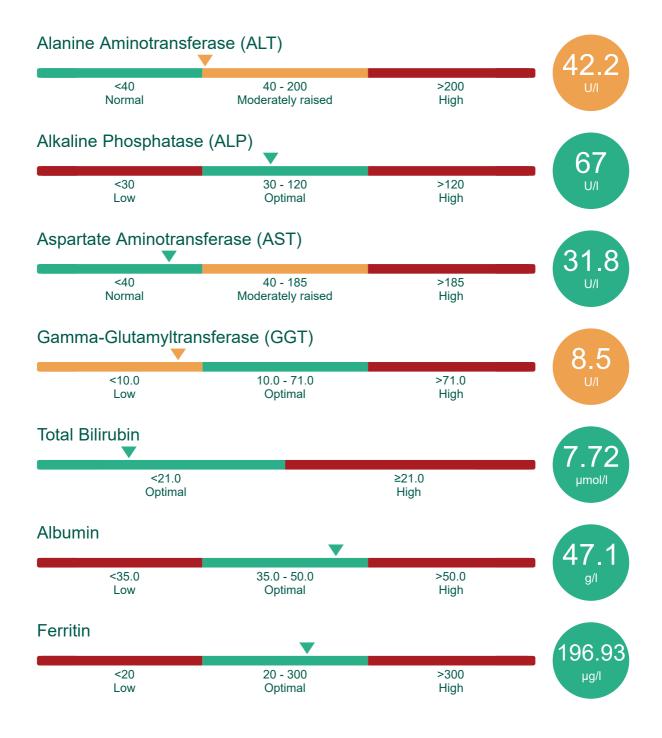


White Blood Cells (Urine) Negative 0 - 25 26 - 100 101 - 500 Optimal +1 +2 +3

Negative Leuk/µl

Liver Health

The liver is a vital organ that plays a major role in the regulation of metabolism. The liver performs many complex functions, which include processing of carbohydrates, proteins and fats, breakdown of harmful or toxic substances, decomposition of red blood cells, removal of waste products from the blood and the production and secretion of bile. Bile is a fluid, which aids in the digestion of fats. Once secreted from the liver, bile travels through a series of ducts to the small intestine or to the gallbladder for storage. Liver disease encompasses many conditions that can cause damage to the liver, such as cirrhosis (irreversible scarring of liver tissue), hepatitis (inflammation of the liver), fatty liver disease, gallbladder disease and bile duct obstruction. The Liver Health panel consists of tests that evaluate the function of the liver.





Nutritional Health

Nutrition is the supply of materials (in the form of food), which are necessary to allow the body to function normally. Vitamins and minerals support normal growth, and help organs and cells to function. Therefore, good nutrition is vital for health and wellbeing. A poor diet or malabsorption disorders (conditions caused by an impaired ability to digest and/or absorb nutrients from food) may lead to nutritional deficiency. The Nutritional Health panel evaluates the levels of various nutrients and can help identify whether an individual's nutritional status is adequate.





Bone Health

Bones provide structural support for the body and offer protection to delicate organs and tissues (e.g. the ribs protect the heart and lungs and the skull protects the brain). Bones are subject to a continuous remodelling process where old bone tissue is replaced with new tissue. For bones to remain strong and healthy, various factors are required, including calcium and vitamin D. Osteoporosis is a condition in which bones lose density and become weak. Risk factors for osteoporosis include oestrogen deficiency (post-menopause), vitamin D deficiency, calcium deficiency and an inactive lifestyle. Bone Health helps evaluate the levels of these important bone-strength factors, which can be useful for identifying individuals at risk of future bone-related health problems.





Infection & Inflammation

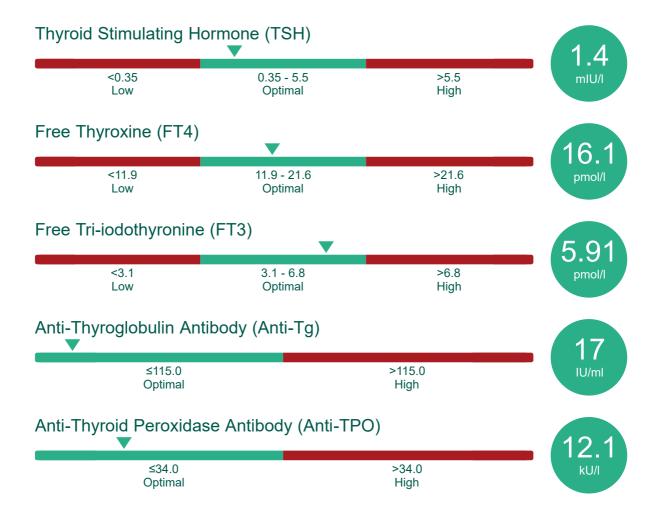
Inflammation is the body's natural response to infection, irritation or injury and is characterised by pain, swelling, warmth and redness of the affected area. Inflammation is a protective mechanism that occurs in an attempt to remove the cause of the injury or irritation and to initiate healing and repair. The Infection & Inflammation panel can indicate the presence of infection or inflammation in the body.





Thyroid Health

The thyroid gland plays an important role in controlling the body's metabolism by producing hormones. The thyroid hormones help the body to use energy, stay warm and keep the heart, brain, muscle and other organs functioning properly. Thyroid Health consists of tests that can be used to help diagnose an 'underactive thyroid' (hypothyroidism) or an 'overactive thyroid' (hyperthyroidism), or to monitor the treatment of these conditions.





Prostate Health

Prostate specific antigen (PSA) is a protein produced by cells of the prostate gland. Prostate specific antigen is detectable in the serum of almost all men and levels tend to increase with age and size of the prostate. Although PSA is highly specific for prostate disease, it is not specific for prostate cancer. Two forms of PSA are found in the blood; PSA that is 'free' and PSA that is 'bound' to protein. The combination of these two forms comprises the Total PSA (TPSA). In most cases, this panel consists of the measurement of TPSA alone. However, if TPSA is elevated, Free PSA (FPSA) is also measured and the percentage of FPSA to TPSA is calculated. FPSA is only applicable when TPSA is elevated. It should be noted that in men under the age of 50, no specific reference range exists for TPSA and the ranges provided are for guidance only.



Results for your Doctor

This section contains all your test results. Your doctor may prefer to see your test results in this format. The results that are either positive or fall outside the reference range are highlighted in red.

Test	Result	Units	Reference Range
Personal Health Measureme	ents		
Height	1.87	m	N/A
Weight	117.9	kg	N/A
Body Mass Index (BMI)	33.7	kg/m²	<18.5 Underweight 18.5 - 24.9 Optimal 25 - 29.9 Overweight ≥30 Obese
Waist Circumference	118	cm	<94 Optimal 94 - 102 Moderate risk >102 High risk
Hip Circumference	112	cm	N/A
Waist / Hip Ratio	1.054	Ratio	<0.95 Low risk 0.95 - 1.0 Moderate Risk >1.0 High risk
Pulse	88	ВРМ	60 - 100 Optimal
Systolic Blood pressure	144	mmHg	0 - 89.9 Low 90 - 119.9 Optimal 120 - 129.9 Normal 130 - 139.9 High Normal 140 - 250 High
Diastolic Blood pressure	85	mmHg	0 - 59.9 Low 59.9 - 79.9 Optimal 79.9 - 84.9 Normal 84.9 - 89.9 High Normal 90 - 140 High
Full Blood Count			
Haemoglobin	158	g/l	130.0 - 180.0 Optimal
Haematocrit	45.9	%	40.0 - 54.0 Optimal
Mean Cell Haemoglobin (MCH)	31.3	pg	27.0 - 32.0 Optimal
Mean Cell Haemoglobin Concentration (MCHC)	344	g/I	320.0 - 360.0 Optimal
Red Blood Cell Mean Cell Volume (MCV)	90.9	fl	76.0 - 100.0 Optimal
Red Blood Cell Count	5.05	10 ¹² /L	4.5 - 6.5 Optimal
Basophil Count	0.04	10°/L	0.01 - 0.1 Optimal
Eosinophil Count	0.13	10°/L	0.04 - 0.4 Optimal
Lymphocyte Count	1.99	10°/L	1.0 - 3.5 Optimal
Monocyte Count	0.5	10º/L	0.2 - 0.8 Optimal

Test	Result	Units	Reference Range		
Full Blood Count					
Neutrophil Count	2.78	10°/L	2.0 - 7.5 Optimal		
White Blood Cell Count	5.44	10°/L	4.0 - 10.0 Optimal		
Platelet Count	229	10°/L	150 - 450 Optimal		
Iron Status					
Ferritin	196.93	μg/l	20 - 300 Optimal		
Heart Health					
Total Cholesterol	4.75	mmol/l	<5.00 Desirable		
LDL Cholesterol	2.87	mmol/l	<3.00 Desirable		
HDL Cholesterol	1.02	mmol/l	<1.55 Low ≥1.55 Desirable		
Total Cholesterol / HDL Cholesterol Ratio	4.66	-	<5.0 Desirable		
Triglycerides	1.31	mmol/l	<2.3 Desirable		
High Sensitivity C-Reactive Protein (hsCRP)	0.64	mg/l	<1 Low Risk		
Cardiovascular Risk Score	10.4	%	<10 Desirable 10 - 20 Moderate Risk >20 High Risk		
Diabetes Health					
Glucose	4.26	mmol/l	4.00 - 5.59 Optimal		
HbA1c	34.5	mmol/mol	<42.0 Optimal		
Metabolic Syndrome					
Height	1.87	m	N/A		
Weight	117.9	kg	N/A		
Body Mass Index (BMI)	33.7	kg/m²	≤30 Optimal >30 Risk		
Waist Circumference	118	cm	<94 Optimal ≥94 Risk		
Systolic Blood pressure	144	mmHg	<130 Optimal ≥130 Risk		
Diastolic Blood pressure	85	mmHg	<85 Optimal ≥85 Risk		
Glucose	4.26	mmol/l	<5.6 Optimal		
HDL Cholesterol	1.02	mmol/l	<1.03 Risk ≥1.03 Optimal		
Triglycerides	1.31	mmol/l	<1.7 Optimal		

Test	Result	Units	Reference Range	
Metabolic Syndrome				
HbA1c	34.5	mmol/mol	<42.0 Optimal	
High Sensitivity C-Reactive Protein (hsCRP)	0.64	mg/l	<1 Low Risk	
Kidney Health				
Creatinine	92.4	µmol/l	64.0 - 104.0 Optimal	
Estimated Glomerular Filtration Rate (eGFR)	96	ml/min/1.73m²	≥60 Satisfactory	
Calcium (adjusted)	2.32	mmol/l	2.2 - 2.6 Optimal	
Chloride	100	mmol/l	95 - 108 Optimal	
Phosphate	0.94	mmol/l	0.8 - 1.5 Optimal	
Potassium	5.14	mmol/l	3.5 - 5.3 Optimal	
Sodium	137.7	mmol/l	133.0 - 146.0 Optimal	
Urea	4.99	mmol/l	2.5 - 7.8 Optimal	
Urinalysis				
Bilirubin (Urine)	Negative	mg/dl	Negative Optimal	
Glucose (Urine)	Normal	mg/dl	Normal Optimal	
Ketones (Urine)	Negative	mg/dl	Negative Optimal	
Nitrite (Urine)	Negative	mg/dl	Negative Optimal	
pH (Urine)	6	рН	5.0 - 7.5 Optimal	
Protein (Urine)	Negative	mg/dl	Negative Optimal	
Red Blood Cells (Urine)	Negative	RBC/µI	Negative Optimal	
Urobilinogen (Urine)	Normal	mg/dl	Normal Optimal	
White Blood Cells (Urine)	Negative	Leuk/µl	Negative Optimal	
Liver Health				
Alanine Aminotransferase (ALT)	42.2	U/I	<40 Normal 40 - 200 Moderately raised >200 High	
Alkaline Phosphatase (ALP)	67	U/I	30 - 120 Optimal	
Aspartate Aminotransferase (AST)	31.8	U/I	<40 Normal	
Gamma-Glutamyltransferase (GGT)	8.5	U/I	<10.0 Low 10.0 - 71.0 Optimal >71.0 High	
Total Bilirubin	7.72	µmol/l	<21.0 Optimal	
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Test	Result	Units	Reference Range		
Liver Health	Liver Health				
Albumin	47.1	g/l	35.0 - 50.0 Optimal		
Ferritin	196.93	μg/l	20 - 300 Optimal		
Nutritional Health					
Albumin	47.1	g/I	35.0 - 50.0 Optimal		
Calcium (adjusted)	2.32	mmol/l	2.2 - 2.6 Optimal		
Vitamin D	107	nmol/l	50 - 375 Sufficiency		
Bone Health					
Alkaline Phosphatase (ALP)	67	U/I	30 - 120 Optimal		
Calcium (adjusted)	2.32	mmol/l	2.2 - 2.6 Optimal		
Phosphate	0.94	mmol/l	0.8 - 1.5 Optimal		
Vitamin D	107	nmol/l	50 - 375 Sufficiency		
Infection & Inflammation					
C-Reactive Protein (CRP)	0.64	mg/l	≤5.0 Optimal		
Thyroid Health					
Thyroid Stimulating Hormone (TSH)	1.4	mIU/I	0.35 - 5.5 Optimal		
Free Thyroxine (FT4)	16.1	pmol/l	11.9 - 21.6 Optimal		
Free Tri-iodothyronine (FT3)	5.91	pmol/l	3.1 - 6.8 Optimal		
Anti-Thyroglobulin Antibody (Anti-Tg)	17	IU/ml	≤115.0 Optimal		
Anti-Thyroid Peroxidase Antibody (Anti-TPO)	12.1	kU/I	≤34.0 Optimal		
Prostate Health					
Total Prostate Specific Antigen (TPSA)	0.78	μg/l	≤1.4 Optimal		